

NOTICE OF FEDERAL FUNDING OPPORTUNITY EXECUTIVE SUMMARY

Federal Agency Name(s): Office of Oceanic and Atmospheric Research (OAR),
National Oceanic and Atmospheric Administration (NOAA), Department of Commerce
Funding Opportunity Title: Climate Program Office FY2021
Announcement Type: Initial
Funding Opportunity Number: NOAA-OAR-CPO-2021-2006389

Catalog of Federal Domestic Assistance (CFDA) Number: 11.431, Climate and
Atmospheric Research

Dates: Letters of intent (LOIs) for all competitions should be received by email by 5:00
p.m. Eastern Time on August 17, 2020.

Full Applications: Full applications for all competitions must be received by 5:00 p.m.
Eastern Time, on November 30, 2020. For the AC4 only competition, the full
applications must be received by 5:00 p.m. Eastern Time on October 19, 2010.

Funding Opportunity Description: Climate variability and change present society with
significant economic, health, safety, and security challenges. As part of the National
Oceanic and Atmospheric Administration (NOAA) climate portfolio within the Office
of Oceanic and Atmospheric Research (OAR), the Climate Program Office (CPO)
addresses these climate challenges by managing competitive research programs through
which high-priority climate science, assessments, decision support research, outreach,
education, and capacity-building activities are funded to advance our understanding of
the Earth's climate system, and to foster the application and use of this knowledge to
improve the resilience of our Nation and its partners. Through this announcement, CPO
is seeking applications for 6 individual competitions in FY21. Several of these
competitions are relevant to high-priority climate risk areas CPO is organizing some of
its activities around to improve science understanding and/or capabilities that result in
user-driven outcomes in four initial risk areas: Coastal Inundation, Marine Ecosystems,
Water Resources and Extreme Heat. More information about CPO's Climate Risk
Areas Initiative can be found [here](#).

NOAA, OAR, and CPO encourage applicants and awardees to support the principles of
diversity and inclusion when writing their proposals and performing their work.
Diversity is defined as a collection of individual attributes that together help
organizations achieve objectives. Inclusion is defined as a culture that connects each

employee to the organization. Promoting diversity and inclusion improves creativity, productivity, and the vitality of the climate research community in which CPO engages.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

Climate variability and change present society with significant economic, health, safety, and security challenges. As part of the National Oceanic and Atmospheric Administration (NOAA) climate portfolio within the Office of Oceanic and Atmospheric Research (OAR), the Climate Program Office (CPO) addresses these climate challenges by supporting climate research, observations, monitoring, modeling, assessments, interdisciplinary decision-support research, outreach, education, and partnership development. These investments support NOAA's mission of "Science, Service, and Stewardship" and are designed to advance our understanding of the Earth's climate system and to foster the application and use of this knowledge to improve the resilience of our Nation and its partners. The position of CPO at the intersection of NOAA's science and service missions, the climate research community, and the broader climate enterprise enables it to provide strategic vision, lead a research agenda and forge partnerships that enhance society's ability to make effective decisions. CPO also supports NOAA's mandated responsibilities under the National Climate Program Act, Global Change Research Act and its National Climate Assessment, the National Integrated Drought Information System Act, and similar international endeavors such as the World Climate Research Program.

CPO programs manage a competitive process through a NOFO announcement to make awards supporting high-quality research conducted across the United States and internationally on the most urgent climate science questions. While each program area has its own focus, together they advance understanding of Earth's climate system through interdisciplinary, integrated scientific research, and leveraging the resulting knowledge, data, and systems to enhance society's ability to plan and respond to climate variability and climate change. Toward this end, CPO also supports partnerships that build end-to-end pipelines of information (e.g.,

integrated information systems) flowing from scientists to decision-makers.

B. Program Priorities

CPO supports competitive research through three major program areas: Earth System Science and Modeling (ESSM); Climate and Societal Interactions (CSI); and Communication, Education and Engagement (CEE). Through this announcement, CPO is seeking applications for 6 individual competitions in FY21. Several of these competitions are relevant to high-priority climate risk areas. CPO is organizing some of its activities around these areas to improve science understanding and/or capabilities that result in user-driven outcomes. The four initial risk areas are: Coastal Inundation, Marine Ecosystems, Water Resources and Extreme Heat. More information about CPO's Climate Risk Areas Initiative can be found [here](#). Prior to submitting applications, investigators are highly encouraged to learn more about CPO and its programs, as well as specific program priorities for FY21. In addition, interactions, partnerships, or collaborations with NOAA Laboratories and Cooperative Institutes are encouraged.

This information, along with the names and contact information for each Competition Manager, is provided in information sheets that can be found at the following website: <http://cpo.noaa.gov/Grants>.

The 6 competitions covered by this announcement are as follows:

- AC4: Emissions, Air Quality, and Heat in Urban Areas
- AC4 and COM: Atmospheric impacts due to changes in anthropogenic activity during the COVID-19 pandemic
- MAPP: New Climate Monitoring Approaches and Products for Areas of Climate Risk
- MAPP: Process-Oriented Diagnostics for NOAA Climate Model Improvement and Applications
- COM and CVP: Innovative Ocean Dataset/Product Analysis and Development for support of the NOAA Observing and Climate Modeling Communities
- Adaptation Sciences (AdSci) Program: Advancing Climate Adaptation and

Coastal Community Resilience

1. Earth System Science and Modeling (ESSM) Division

The mission of CPO's Earth System Science and Modeling (ESSM) Division is to advance scientific understanding of Earth's atmosphere, ocean, land, and cryosphere as an integrated system and to improve NOAA's Earth system climate models and predictions. To accomplish this mission, ESSM funds a unique and highly flexible research enterprise, including process-level studies, predictability studies of climate phenomena, testing for research-to-operation and application transitions; improving model representations of key processes and prediction technologies, and developing methodologies, tools and products for applications.

A. Atmospheric Chemistry, Carbon Cycle, and Climate (AC4) Program

AC4 is a competitive research program that incorporates research on atmospheric chemistry and the carbon cycle. In collaboration with the NOAA Laboratories and the academic community, the AC4 program supports research to determine the processes governing atmospheric concentrations of trace gases and aerosols in the context of the Earth System. The program aims to contribute a process-level understanding of the Earth System through observation, modeling, analysis, and field studies to support the development and improvement of models, and to inform carbon and air pollution management efforts.

In FY21, the AC4 Program is soliciting research proposals for the following competitions:

- AC4: Emissions, Air Quality, and Heat in Urban Areas
- AC4 and COM: Atmospheric impacts due to changes in anthropogenic activity during the COVID-19 pandemic

B. Climate Variability and Predictability (CVP) Program

The Climate Variability and Predictability (CVP) Program supports research that enhances our process-level understanding of the climate system through observation, modeling, analysis, and field studies. This vital knowledge is needed to improve climate models and predictions so that scientists and society can better anticipate the impacts of future climate variability and change.

In FY21, CVP is partnering with the COM program (please see the COM/CVP Competition).

C. Modeling, Analysis, Predictions, and Projections (MAPP) Program

The mission of the Modeling, Analysis, Predictions, and Projections (MAPP) Program is to enhance the Nation's capability to predict variability and change in Earth's climate system. The MAPP Program focuses on the coupling, integration, and application of Earth System models and analyses across NOAA, among partner agencies, and with the external research community. Primary objectives include: 1) improving Earth System models; 2) supporting an integrated Earth System analysis capability; 3) improving methodologies for global to regional scale climate analysis, predictions, and projections; and 4) developing climate modeling capabilities and applications relevant to decision makers based on climate analyses, predictions, and projections. MAPP sits within the Earth System Science and Modeling Division (ESSM) of the NOAA Office of Oceanic and Atmospheric Research (OAR) Climate Program Office (CPO).

In FY21 the MAPP program is soliciting research proposals for the following two competitions:

- New Climate Monitoring Approaches and Products for Areas of Climate Risk

Proposals are invited to advance new climate monitoring products or approaches.

- Process-Oriented Diagnostics for NOAA Climate Model Improvement and Applications

Proposals are invited to develop new process-oriented diagnostics for model evaluation and development and lead further development of a diagnostics software package.

D. Climate Observations and Monitoring (COM) Program

The COM program works collaboratively with NOAA and other federal laboratories, NOAA cooperative institutes, and academic institutions to competitively leverage existing observational assets and develop value-added

products, diagnostics, and indices that have a strong scientific foundation, and are publicly accessible. Products advance understanding and improve modeling of climate variability and changes through exploitation of observations to ultimately detect and forecast the earth system.

In FY21, the COM and CVP program in partnership with the Global Ocean Monitoring and Observing Program Office, is soliciting proposals for the following competition:

- Innovative Ocean Dataset/Product Analysis and Development for support of the NOAA Observing and Climate Modeling Communities.

Proposals are invited that will increase the use of NOAA observations by the NOAA observing, modeling and/or satellite communities, and/or the broader scientific community by one of the following:

1. Develops new observation-based (in situ, satellite) ocean synthesis datasets or products (physical and/or biogeochemical) for climate applications through the application of existing methods , or the development of new state of art, innovative methods and approaches (e.g. ocean state estimation, data assimilation, quantification of observational uncertainty).
2. Evaluates current methods and approaches for ocean observing and modeling, and the ability of observed and modeled data/products to reproduce physical or biogeochemical processes, climate phenomena, or interactions between Earth System components on different timescales. Proposals should examine bias(es) in observed and modeled data/products and advance understanding of the cause(s) for large differences between observed and modeled ocean data/products. Collaborations between the ocean observing and climate modeling community are strongly encouraged for Type 2 proposals.

Please see the competition information sheet for more details and requirements for Type 1 and 2 proposals.

2. Climate and Societal Interactions (CSI) Division

The NOAA Climate Program Office's (CPO) Climate and Societal Interactions (CSI) Division has traditionally been a home for high impact science, catalyzing some of the earliest US government investments in regionally scaled, societally relevant, interdisciplinary climate research and engagement focused on reducing

vulnerability and risk through the use of climate knowledge and information. Today, CSI continues to work with partners to enhance community and national resilience in the face of climatic changes, through research and engagement activities designed to connect innovative science directly to complex and dynamic preparedness, adaptation and resilience challenges. Programs managed by CSI are a key component of NOAA's cutting edge research enterprise, contributing to its efforts to engage a modern climate research landscape, which has evolved over time to include the private sector, NGOs, interdisciplinary teams and the social sciences at large. Moving forward, the CSI Division is reorganizing in order to streamline, expand and build upon past investments, and address cutting edge topics in adaptation science - a critical cornerstone to a more resilient future.

For FY21, the Adaptation Science Program is soliciting proposals focused on US coastal communities planning for the future impacts of flooding in the context of climate change and other stressors ("Coastal" includes all US coastal jurisdictions (e.g. watersheds) that border the Pacific and Atlantic Oceans, Gulf of Mexico, Caribbean Sea, and Great Lakes). Specifically, the program seeks to advance the science of adaptation by soliciting proposals for interdisciplinary and social science research projects that accelerate, expand and enhance the effectiveness and scale of adaptation and resilience planning and implementation in the face of complex challenges in coastal settings through collaborative science, engagement, and innovation. The program is particularly interested in proposals focused on the complex challenges of climate-sensitive flooding and related impacts in areas with vulnerable populations.

C. Program Authority

49 U.S.C. 44720(b), 15 U.S.C. 2904, 15 U.S.C. 2931-2934

II. Award Information

A. Funding Availability

In FY21, approximately \$10 million will be available for approximately 90 new awards pending budget appropriations (see section I.B above). It is anticipated that most awards will be at a funding level between \$50,000 and \$300,000 per year with exceptions for larger awards, unless otherwise noted below. Federal funding for FY 2022 may be used to fund awards submitted under this Notice of Funding

Opportunity. Current or previous grantees are eligible to apply for a new award that builds on, but does not replicate, activities covered in existing or previous awards. Current grantees should not apply for supplementary funding through this announcement.

Funding availability per FY21 competition is provided below.

1. AC4 - Emissions, Air Quality, and Heat in Urban Areas, Proposals should not exceed \$200,000 per year. It is anticipated that \$1 million will be available for the first year of the funded projects.
2. AC4 and COM - Atmospheric impacts due to changes in anthropogenic activity during the COVID-19 pandemic, Proposals should not exceed \$200,000 per year. It is anticipated that \$1 million will be available for the first year of the funded projects.
3. MAPP - New Climate Monitoring Approaches and Products for Areas of Climate Risk. Proposals should not exceed \$150,000 per year. It is anticipated that \$1.5 million will be available for the first year of funded projects.
4. MAPP - Process-Oriented Diagnostics for NOAA Climate Model Improvement and Applications. Proposals should not exceed \$180,000 per year for each type I project, or \$750,000 for a type II project. It is anticipated that \$2.0 million will be available for the first year of funded projects.
5. COM, CVP - Depending on the availability of funds and quality of proposals, COM (with contributions from CVP and GOMO) will seek to fund 2 and/or three year projects in FY21. Proposals should not exceed \$150,000 per year, or \$450,000 total. It is anticipated that \$1.2 million will be available for the first year of funded projects.
6. AdSci - Depending on the availability of funds and the quality of proposals, AdSci will seek to fund a combination of 1 and 2 year projects in FY 21. Proposals should not exceed \$300,000 total. It is anticipated that \$3 million will be available for the first year of funded projects.

B. Project/Award Period

1. AC4 Projects are expected to last 2-3 years.
2. AC4 and COM projects are expected to last 1-2 years.
- 3/4. MAPP Projects across its competitions are expected to last up to 3 years.
5. COM - Projects are expected to last 2 - 3 years.
6. AdSci - Proposals should either be 1 or 2 years.

C. Type of Funding Instrument

The funding instrument for awards will be a grant. If, however, it is anticipated that NOAA will be substantially involved in the implementation of the project, a cooperative agreement may be awarded. Examples of substantial involvement may include, but are not limited to, applications for collaboration between NOAA scientists and a recipient scientist or contemplation by NOAA of detailing Federal personnel to work on proposed projects. NOAA will make decisions regarding the use of a cooperative agreement on a case-by-case basis. Funding for contractual arrangements for services and products for delivery to NOAA is not available under this announcement.

If the applicant is at an institution that has a NOAA Cooperative Institute (CI), the applicant is encouraged to submit a proposal that references the CI by attaching a cover letter to the proposal stating the desire to have the grant associated with the CI.

III. Eligibility Information

A. Eligible Applicants

Eligible applicants are institutions of higher education, other nonprofits, commercial organizations, international organizations, and state, local and Indian tribal governments. Federal agencies or institutions are not eligible to receive Federal assistance under this notice.

B. Cost Sharing or Matching

All CPO programs have no cost sharing or matching criteria.

- C. Other Criteria that Affect Eligibility
None.

IV. Application and Submission Information

A. Address to Request Application Package

Application packages are at grants.gov. For applicants without Internet access, please contact the CPO Grants Manager Diane Brown by mail at NOAA Climate Program Office (R/CP1), SSMC3, Room 12734, 1315 East-West Highway, Silver Spring, MD 20910 to obtain an Application Package.

B. Content and Form of Application

1. Letter of Intent (LOI)

The purpose of the LOI process is to provide information to potential applicants on the relevance of their proposed project to the competition in advance of preparing a full application. Full applications will be encouraged only for LOIs deemed relevant. Applicants who have not been encouraged may still submit a full application. While LOIs are strongly encouraged, applicants are not required to submit them and may submit a full application even if they have not submitted an LOI.

LOIs should be submitted by email (for MAPP competitions, applicants should check the information sheet for requested means of LOI submission) to the identified NOAA Competition Manager by the deadline specified in section IV.C below (check competitions information sheet for contact information). The LOI should provide a concise description of the proposed work and a statement regarding its relevance to the targeted competition. The LOI should be no more than two pages in length and should include the items listed below. If these items are not included or the LOI is submitted late, the LOI may not be considered:

Identification of the competition that is being targeted in the LOI.

- Competition Name
- A tentative project title.
- Name(s) and institution(s) of the Lead Principal Investigator(s) and other Principal Investigator(s).
- Statement of the problem.

- Brief summary of work to be completed, methodology to be used, data sets needed or to be collected.
- Approximate cost of the project.
- Relevance to the Competition that is being targeted.

A response to the LOI from the Competition Manager (e-mail or letter) will be sent to the investigator within four weeks after the LOI's due date encouraging or discouraging a full application based on its relevance to the targeted competition. It is then entirely up to the investigator whether to submit a full application.

2. Full Application

Failure to comply with these provisions will result in applications being returned without review. Full applications are limited to 35 pages, single spaced, using 12-point font type with one-inch margins on standard 8.5 by 11 inch paper. For full applications with three or more Principal Investigators, the page limit is 40 pages.

The page limit includes:

- Title page
- Abstract
- Results from prior research
- Project Narrative
- Budget narrative
- Budget table
- Vitae
- Current and pending support
- Associated figures
- References
- Data/Information Sharing Plan
- Statement of Diversity and Inclusion.

For applications to the MAPP Competitions, the form to request the use of NOAA's high- performance computing platforms is considered part of the full proposal, but it will not be included in the page count. Furthermore, transition plans will not be counted toward the page count, but should not exceed three pages in length.

The full proposal and Indirect Cost Rate Agreement (IDCRA) should be put into one electronic file. The budget table/justification should be submitted in a file labeled budget narrative. The Federal Forms (SF424, SF424A, SF424B, CD511) and other mandated forms should be inserted in separate files when submitted and

are not included in the page count.

The following forms and elements are required in each application.

(1) Title page: The title page shall identify the Principal Investigator(s) (PI) and institutional representative and clearly indicate which Competition is being addressed by name and Competition number. The title page should also include all co-PIs from Federal Institutions. If more than one investigator is listed on the title page, please identify the lead investigator. The lead PI and institutional representative should be identified by: full name, title, organization, telephone number, email, and address. For paper submissions, the lead PI and the institutional representative must sign the title page. The total amount of Federal funds being requested should be listed for each budget period. If there are several institutions submitting separate applications associated with the same project, the names of all component institutions along with their lead PI name, e-mail, and amount requested per year must also appear on the title page of all applications that anticipate being funded under the same project.

(2) Abstract: A one-page abstract must be included and should contain the project title, an introduction to the problem, rationale, and a brief summary of the work to be completed. Abstracts must identify the name of the Competition that is being targeted and must also include a paragraph describing the work's broader impacts and relevance to the Competition that is being targeted as well as NOAA's long-term climate research goals stated in section I.A. For multiple applications associated with the same project, the abstract must be identical in all applications. Failure to include this paragraph can result in the application being denied without additional review.

(3) Results from prior research: The results of each prior research project led by the Principal Investigator(s) during the last three years relevant to the proposed effort should be summarized in brief paragraphs. Because NOAA believes it is important that data sets developed with its support should be shared with the scientific community, PIs should also indicate how and when they have made their data accessible and usable by the community in the past. This section should not exceed two pages. For multiple applications associated with the same project, this section must be identical in all applications.

(4) **Project Narrative:** The proposed project must be completely described, including identification of the problem, scientific objectives, proposed methodology, and relevance to the Competition to which you are submitting the proposal and to NOAA's long-term climate research goals. Benefits of the proposed project to the general public and the scientific community should be discussed. The statement of work, excluding references, figures, and other visual materials, must not exceed 15 pages of text. Applications from three or more investigators may include a statement of work containing up to 20 pages of overall project description. For multiple applications associated with the same project, all applications must have an identical statement of work, including a clear statement of the roles and responsibilities of each applicant.

(5) **Data/Information Sharing Plan:**

Proposals submitted in response to this announcement must include a data management plan (up to 2 pages). See section VI.B Administrative and National Policy requirements below for additional information of what the plan should contain.

(6) **Statement of Diversity and Inclusion:** CPO recognizes that it has a particular and unique opportunity to support NOAA's commitment to diversity and inclusion by taking an intentional step that encourages program applicants to consider diversity and inclusion as part of their scientific projects. This action has the potential to make an impact on not only the diversity and inclusion in science at NOAA, but also beyond the agency. In this section, describe how well the proposed activity broadens the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.). Examples could include, but are not limited to, full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM).

(7) **Budget Table and Narrative:**

Budget Table: An itemized budget for all years and a total itemized budget must be included as a separate spreadsheet that breaks down the budget per object class category. Travel must be itemized to include destination, airfare, per diem, lodging, and ground travel.

For multiple applications associated with the same project, the Lead Principal Investigator should include a spreadsheet that displays the total budget for all partners. All partners, including the Lead Principal Investigator and any co-PIs

from Federal Institutions, should include a separate budget for their portion of the project.

Budget Narrative: A brief description of the expenses listed on the budget table and how they address the proposed work must be included. Item justifications must include salaries, equipment, publications, supplies, tuition, travel, etc. Investigators who will not be requesting funds for salaries must also be listed, indicating their estimated time of commitment. Purchases of equipment greater than \$5000 must include a purchase versus lease justification.

Duplicate work with different federally funded projects, commonly referred to as "double dipping" is not permitted. As stated in the Code of Federal Regulations, more specifically, Subpart E- Cost Principles, 200.430 (i-vii), Standards for Documentation of Personnel Expenses. "Charges to Federal awards for salaries and wages must be based on records that accurately reflect the work performed." Additionally, "Reasonably reflect the total activity for which the employee is compensated by the non-Federal entity, not exceeding 100% of compensated activities."

(8) **Federal Budget Forms:** Budget numbers corresponding with the descriptions contained in the statement of work and budget table must be included. In addition to including the total budget on the SF424, the application must include the total budget and budgets for years 1, 2, and 3 in separate columns in Section B on page 1 on the SF424A. (Note that this revised 424A Section B format is a NOAA requirement that is not reflected in the Instructions for the SF 424A). Note that these forms are not part of the required page limit.

For multiple applications associated with the same project, each application requesting funding from NOAA needs to complete the federal budget forms for their specific institution.

(9) **Indirect Costs:** A copy of the institution's current Indirect Cost Rate Agreement (IDCRA) must be included. The IDCRA does not, however, count as part of the required page limit. To obtain an indirect cost rate if your institution does not already have one, a grantee must submit an indirect cost proposal to its cognizant agency and negotiate an indirect cost agreement. If an applicant has not previously (ever) established an indirect cost rate with a Federal agency they may choose to negotiate a rate with the Department of Commerce or use the de minimis

indirect cost rate of 10% of MTDC (as allowable under 2C.F.R. 200.414). This document is not apart of the page limit.

(10) Vitae: Abbreviated curriculum vitae are requested with each application. Reference lists should be limited to all publications in the last three years with up to five other relevant papers. For multiple applications associated with the same project, each application should include identical vitae for all applications.

(11) Current and pending support: For each Principal Investigator and Co-Principal Investigator(s), submit a list of all current and pending Federal support that includes project title, supporting agency with grant number, investigator months per year, dollar value, and duration. Requested values should be listed for pending support. The list of support will be included in the page limit for the proposals.

For multiple applications associated with the same project, each application should include identical current and pending support information for all applications.

All letters of support should be submitted as part of the full application and are not included in the page limit for the proposals.

(12) DUNS Number: All applications must have a DUNS (Dun and Bradstreet Data Universal Numbering System) number when applying for federal grants. No application is deemed complete without the DUNS number, and only the Office of Management and Budget (OMB) may grant exceptions.

C. Unique Entity Identifier and System for Award Management (SAM)

In order to submit an application through Grants.gov, an applicant must register for a Grants.gov user ID and password. Note that *this process can take between three to five business days or as long as four weeks* if all steps are not completed correctly. To avoid delays, applicants are strongly encouraged to start early and not wait until the approaching application deadline before registering, logging in, reviewing the application instructions, and applying. Information about the Grants.gov registration process for organizations can be found at

http://grants.gov/applicants/organization_registration.jsp.

Please note that organizations already registered with Grants.gov do not need to re-register; however, all registered organizations must keep their Grants.gov password and SAM database (which now incorporates CCR) registration up-to-date or their applications will not be accepted by Grants.gov. Note that your CCR username will not work in SAM. You must create a new SAM user account to renew or update your registration. Registration on SAM is a requirement. To obtain additional information and to verify that all required registrations are current, please visit www.sam.gov/portal/public/SAM.

If you experience a Grants.gov systems issue (technical problems or glitches with the Grants.gov website) that you believe threatens your ability to complete a submission before the application deadline, please do all of the following:

- Print any error message received
- Call the Grants.gov Contact Center at 1-800-518-4726 for immediate assistance
- Contact NOAA using the contact information in section VIII. of this NOFO prior to the close of the competition
- Ensure that you obtain a case number regarding your communications with Grants.gov

In the event of a confirmed systems issue, NOAA reserves the right to accept an application in an alternate format prior to the application deadline. Problems with an applicant organization's computer system or equipment are not considered systems issues. Similarly, an applicant's failure to do the following are not considered systems issues:

- Complete the required registration
- Ensure that a registered Authorized Organization Representative (AOR) submits the application
- Read an email message with guidance from Grants.gov

D. Submission Dates and Times

Letters of intent (LOIs) for all competitions should be received by email by 5:00 p.m. Eastern Time on August 17, 2020.

Full Applications: Full applications for all competitions must be received by 5:00 p.m. Eastern Time, on November 30, 2020. For the AC4 only competition, the full

applications must be received by 5:00 p.m. Eastern Time on October 19, 2010.

E. Intergovernmental Review

Applications under this program are not subject to Executive Order 12372, Intergovernmental Review of Federal Programs.

F. Funding Restrictions

Fees and profits are disallowed.

G. Other Submission Requirements

All applications should be submitted through grants.gov. If an applicant does not have Internet access, CPO Grants Manager Diane Brown should be contacted by mail at NOAA Climate Program Office (R/CP1), SSMC3, Room 12734, 1315 East-West Highway, Silver Spring, MD 20910 for hard copy submission instructions.

Faxed or emailed copies of applications will not be accepted.

Federal lead investigators who wish to receive funding to this NOFO must prepare a proposal according to the NOFO guidelines and submit the proposal to the appropriate competition manager directly, instead of to Grants.gov. Federal co-investigators must submit a proposal identical to the proposal lead's but with personalized budget information.

V. Application Review Information

A. Evaluation Criteria

1. Importance/Relevance and Applicability of Application to the Program Goals (Stage 1 Weight=0%) (Stage 2 Weight=100%) (Final Weight=25%)
This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, tribal, or local activities. For the CPO Grant Program Competition, this includes importance and relevance to the scientific priorities of the selected Competition(s), the PI's record of making his/her data accessible and usable by the scientific community in the past, the Statement of Diversity and Inclusion described in Section IV.B(6), and the procedures described in Section IV.B(5) Data/Information Sharing Plan will also be considered when evaluating the importance and relevance of the application. For the CSI

competitions, the above stated relevance score will also include the applicant's approach for engaging decision makers and building networks of relationships to help support decision makers with scientific information.

2. Technical/Scientific Merit (Stage 1 Weight=70%) (Stage 2 Weight=0%) (Final Weight=52.5%)

This criterion assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether the goals of the Competition will be realized through clear project goals and objectives. For CSI competitions, the above stated merit score will also include the applicant's credibility in capacity-building approaches.

3. Overall Qualifications of Applicants (Stage 1 Weight=20%) (Stage 2 Weight=0%) (Final Weight=15%)

This criterion assesses whether the applicant team possesses the necessary education, experience, training, facilities, and/or administrative resources to accomplish the project. For CSI competitions, the above stated qualifications score will also include the PIs' record of collaborating with decision-making communities.

4. Project Costs (Stage 1 Weight = 10%) (Stage 2 Weight = 0%) (Final Weight =7.5%)

This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time frame.

B. Review and Selection Process

Once a full application has been received, an administrative review will first be conducted to determine compliance with requirements and completeness of the application. The selection reviews will then take place in two stages. In Stage 1, independent peer mail reviewers and/or independent peer panel reviewers consisting of both Federal and/or non-Federal experts will evaluate applications using the three criteria described above: technical/scientific merit, overall qualifications of applicants, and project costs. Relevance will be assessed separately in Stage 2. The panel will not give consensus advice. We protect the identities of reviewers to the extent permitted by law.

During Stage 1, each reviewer will provide one score for each of three criteria: technical/scientific merit, overall qualifications of applicants, and project costs for each application. The scores from the reviewers for each application will be combined using the weighting averages to produce a single numerical score for Stage 1. Occasionally a reviewer may, due to lack of familiarity in a particular area,

choose not to score a particular application. Proposals that score a 3.0 or higher (out of a possible high score of 5) in Stage 1 will proceed to Stage 2.

If only a mail peer review is conducted for stage 1, proposals that score a 3.0 or higher (out of a possible high score of 5) in Stage 1 will proceed to Stage 2.

If a mail review and a panel review are both conducted for Stage 1, the mail reviews will be provided to the Stage 1 review panel for use in its deliberations prior to providing its ratings, but the Competition Manager will use only the numerical rank order of the peer review panel to determine the average score for each proposal. Proposals that score a 3.0 or higher (out of a possible high score of 5) in Stage 1 will proceed to Stage 2.

In Stage 2, scores for Importance/Relevance and Applicability of Application to the Program Goals will be determined by a second panel comprising either Federal or a combination of Federal and non-Federal partners. Each panel reviewer will provide a relevance score for each application that moved forward from Stage 1. The Stage 2 panel will not give consensus advice. The applications and their associated scores from Stage 1 will be provided to the Stage 2 panel.

The Stage 1 and Stage 2 weighting of scores for the individual criteria is shown in the following table:

Criterion	Stage 1 Weight	Stage 2 Weight	Final Weight
Importance and Relevance/Applicability	0%	100%	25%
Technical/Scientific Merit	70%	0%	52.5%
Overall Qualifications of Applicants	20%	0%	15%
Project Costs	10%	0%	7.5%
Final Score			
Stage Total	100%	100%	100%

To determine the final score, the scores from Stage 1 and Stage 2 will be combined, with a weighting of 75% for the Stage 1 score and 25% for the Stage 2 score, leading to the overall weightings for each criterion reported in section V.A above. The final score for each application will be used to determine the numerical

rank order of proposals within each Competition.

The Competition Manager will recommend applications to the Selecting Official in numerical rank order unless a recommendation out of rank order is justified based upon any of the factors listed in the following section. Should applications receive a tie score, and funding is not available for every tied application, the Competition Manager may preferentially recommend applications for funding also according to any of the factors listed in the following section. The Competition Manager will review the amounts requested for each selected application (including costs for computing and networking services) and recommend the total duration and the amount of funding, which may be less than the application and budget requested.

C. Selection Factors

The Selecting Official shall select awards in rank order unless a selection out of rank order is justified based upon any of the following factors:

- Availability of funding
 - Balance/distribution of funds:
- Geographically
 - By type of institutions
 - By type of partners
 - By research area
 - By project types
- Duplication of other projects funded or considered for funding by NOAA/Federal agencies
- Program priorities and policy factors
- Applicant's prior award performance
- Partnerships with/participation of targeted group
- Adequacy of information necessary for NOAA staff to make a NEPA determination and draft necessary documentation before recommendations for funding are made to the Grants Officer.

The Selecting Official makes final recommendations for awards to the Grants Officer who is authorized to obligate the funds.

D. Anticipated Announcement and Award Dates

Subject to the availability of funds, review of applications will occur during the 6-7 months following the full applications due date. CPO anticipates that funding

decisions on applications will be made during spring 2021. Such decisions are contingent upon the final FY20 appropriation for NOAA by Congress and the final allocation of funds to CPO by NOAA. Funding for successful applicants is expected to begin during summer 2021 for most approved projects. Applications should use September 1, 2021, as the start date unless otherwise directed by the Competition Manager. For the AC4 competition: Emissions, Air Quality, and Heat in Urban Areas applications should use May 1, 2021, as the start date.

VI. Award Administration Information

A. Award Notices

The Grants Officer will provide notice to the applicant that they have received the award. Successful applicants will receive notification that the application has been recommended for funding by an official of the NOAA Climate Program Office. This notification is not an authorization to begin performance of the project. The official notification of funding, signed by a NOAA Grants Officer, is the authorizing document that allows the project to begin. Notifications will be issued to the Authorizing Official and the Principal Investigator of the project. Unsuccessful applicants will be notified that their application was not selected for recommendation.

B. Administrative and National Policy Requirements

UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS. Through 2 C.F.R. § 1327.101, the Department of Commerce adopted Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, which apply to awards in this program. Refer to <http://go.usa.gov/SBYh> and <http://go.usa.gov/SBg4>.

DOC TERMS AND CONDITIONS. Successful applicants who accept a NOAA award under this solicitation will be bound by Department of Commerce Financial Assistance Standard Terms and Conditions. This document will be provided in the award package in NOAA's Grants Online system at <http://www.ago.noaa.gov> and at <http://go.usa.gov/hKbj>.

DEPARTMENT OF COMMERCE PRE-AWARD NOTIFICATION REQUIREMENTS FOR GRANTS AND COOPERATIVE AGREEMENTS - The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the Federal Register notice of December 30,

2014 (79 FR 78390) are applicable to this solicitation and may be accessed online at <http://www.gpo.gov/fdsys/pkg/FR-2014-12-30/pdf/2014-30297.pdf>.

LIMITATION OF LIABILITY - Funding for programs listed in this notice is contingent upon the availability of continuing Congressional appropriations. Applicants are hereby given notice that funds have not yet been appropriated for the programs listed in this notice. In no event will NOAA or the Department of Commerce be responsible for proposal preparation costs. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

UNPAID OR DELINQUENT TAX LIABILITY. In accordance with Federal appropriations law, an authorized representative of the selected applicant(s) may be required to provide certain pre-award certifications regarding federal felony and federal criminal tax convictions, unpaid federal tax assessments, and delinquent federal tax returns.

NATIONAL ENVIRONMENTAL POLICY ACT

(NEPA). NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), for applicant projects or proposals which are seeking NOAA federal funding opportunities. Detailed information on NOAA compliance with NEPA can be found at the following NOAA NEPA website: <http://www.nepa.noaa.gov/> , including our NOAA Administrative Order 216-6 for NEPA, http://www.nepa.noaa.gov/NAO216_6.pdf , and the Council on Environmental Quality implementation regulations, http://energy.gov/sites/prod/files/NEPA-40CFR1500_1508.pdf . Consequently, as part of an applicant's package, and under their description of their program activities, applicants are required to provide detailed information on the activities to be conducted, locations, sites, species and habitat to be affected, possible construction activities, and any environmental concerns that may exist (e.g., the use and disposal of hazardous or toxic chemicals, introduction of non- indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems). In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting an environmental assessment, if NOAA determines an assessment is required. Applicants will also be required to cooperate with NOAA in identifying feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. Failure to do so shall be grounds for not selecting an application. In some cases if additional information is required

after an application is selected, funds can be withheld by the Grants Officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment on any impacts that a project may have on the environment.

REVIEW OF RISK - After applications are proposed for funding by the selecting official, the Grants Office will perform administration reviews. These may include assessments of the financial stability of an applicant and the quality of the applicant's management systems, history of performance, and the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities. Special conditions that address any risks determined to exist may be applied. Applicants may submit comments to the Federal Awardee Performance and Integrity Information System (FAPIIS) about any information included in the system about their organization for consideration by the awarding agency.

DATA SHARING PLAN - 1. Environmental data and information collected or created under NOAA grants or cooperative agreements must be made discoverable by and accessible to the general public, in a timely fashion (typically within two years), free of charge or at no more than the cost of reproduction, unless an exemption is granted by the NOAA Program. Data should be available in at least one machine-readable format, preferably a widely-used or open-standard format, and should also be accompanied by machine-readable documentation (metadata), preferably based on widely used or international standards. 2. Proposals submitted in response to this Announcement must include a Data Management Plan of up to two pages describing how these requirements will be satisfied. Administrative and National Policy Requirements, below for additional information on what the plan should contain. The Data Management Plan should be aligned with the Data Management Guidance provided by NOAA in the Announcement. The contents of the Data Management Plan (or absence thereof), and past performance regarding such plans, will be considered as part of proposal review. A typical plan should include descriptions of the types of environmental data and information expected to be created during the course of the project; the tentative date by which data will be shared; the standards to be used for data/metadata format and content; methods for providing data access; approximate total volume of data to be collected; and prior experience in making such data accessible. The costs of data preparation, accessibility, or archiving may be included in the proposal budget unless otherwise stated in the Guidance. Accepted submission of data to the NOAA National Centers for Environmental Information (NCEI) is one way to satisfy data sharing

requirements; however, NCEI is not obligated to accept all submissions and may charge a fee, particularly for large or unusual datasets. 3. NOAA may, at its own discretion, make publicly visible the Data Management Plan from funded proposals, or use information from the Data Management Plan to produce a formal metadata record and include that metadata in a Catalog to indicate the pending availability of new data. 4. Proposal submitters are hereby advised that the final pre-publication manuscripts of scholarly articles produced entirely or primarily with NOAA funding will be required to be submitted to NOAA Institutional Repository after acceptance, and no later than upon publication. Such manuscripts shall be made publicly available by NOAA one year after publication by the journal.

INDIRECT COST RATE - If an applicant has not previously established an indirect cost rate with a Federal agency they may choose to negotiate a rate with the Department of Commerce or use the de minimis indirect cost rate of 10% of MTDC (as allowable under 2 C.F.R. §200.414). The negotiation and approval of a rate is subject to the procedures required by NOAA and the Department of Commerce Standard Terms and Conditions. The NOAA contact for indirect or facilities and administrative costs is: Lamar Revis, Grants Officer, NOAA Grants Management Division, 1325 East West Highway, 9th Floor, Silver Spring, MD 20910 lamar.revis@noaa.gov.

MINORITY SERVING INSTITUTIONS - The Department of Commerce/National Oceanic and Atmospheric Administration (DOC/NOAA) is strongly committed to increasing the participation of Minority Serving Institutions (MSIs), i.e., Historically Black Colleges and Universities, Hispanic-serving institutions, Tribal colleges and universities, Alaskan Native and Native Hawaiian institutions, and institutions that work in underserved communities.

FREEDOM OF INFORMATION ACT (FOIA) - In the event that an application contains information or data that you do not want disclosed prior to award for purposes other than the evaluation of the application, mark each page containing such information or data with the words "Privileged, Confidential, Commercial, or Financial Information - Limited Use" at the top of the page to assist NOAA in making disclosure determinations. DOC regulations implementing the Freedom of Information Act (FOIA) are found at 5 U.S.C 552, which sets forth rules for DOC to make requested materials, information, and records publicly available under FOIA. The contents of funded applications may be subject to requests for release under the FOIA. Based on the information provided by you, the confidentiality of the content of funded applications will be maintained to the maximum extent

permitted by law.

PAPERWORK REDUCTION ACT – This notification involves collection-of-information requirements subject to the Paperwork Reduction Act. The use of Standard Forms 424, 424A, 424B, and SF-LLL and CD-346 has been approved by the Office of Management and Budget (OMB) under control numbers 0348-0043, 0348-0044, 0348-0040, and 0348-0046 and 0605-0001.

Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA unless that collection of information displays a currently valid OMB control number.

Sexual Harassment, Other Forms of Harassment, or Sexual Assault.

The Climate Program Office (CPO) will not tolerate sexual harassment, other forms of harassment or sexual assault within the agency, at awardee organizations, or anywhere CPO-funded science and education are conducted. As the primary funding agency of fundamental science and engineering research in the U.S., CPO is committed to promoting safe, productive research and education environments for current and future scientists and engineers. CPO considers the PI/PD and any co-PI/co-PDs(s) identified on a CPO award to be in positions of trust.

The PI/PD and co-PI/co-PD and all award personnel must comport themselves in a responsible and accountable manner during the performance of award activities whether at the grantee organization, on-line, or conducted outside the organization, such as at field sites, or facilities, or during conferences and workshops.

The many U.S. institutions of higher education and other organizations that receive CPO funds are responsible for fully investigating complaints and for compliance with federal non-discrimination laws, regulations and executive orders. In support of this position, CPO has taken steps to bolster our commitment to a safe research environment, including development and implementation of an award term and condition that requires CPO to be notified: 1) of any findings/determinations regarding the PI/PD or co-PI/co-PD that demonstrate a violation of awardee codes of conduct, policies, regulations or statutes relating to sexual harassment, other forms of harassment, or sexual assault; or 2) if the awardee places the PI/PD, or co-PI/co-PD on administrative leave or imposes an administrative action relating to a finding or investigation of a violation of awardee policies, codes of conduct, statutes or regulations relating to sexual harassment, other forms of harassment, or sexual assault.

CPO expects all research organizations to establish and maintain clear and unambiguous standards of behavior to ensure harassment-free workplaces wherever science is conducted. A community effort is essential to eliminate sexual and other forms of harassment in science and to build a scientific workspace where people can learn, grow and thrive.

C. Reporting

Award recipients are required to submit financial and technical progress reports. These reports are to be submitted electronically via <https://grantsonline.rdc.noaa.gov>. The first technical progress report covering the first nine months of a multi-year award is due 10 months after the start date of the award. Each subsequent technical progress report covering a period of 12 months is due 12 months after the previous report. The comprehensive final technical progress report is due 90 days after the expiration date of the award. Technical progress reports should report on adherence to the Data/Information Sharing Plan and all listed publications resulting from the grant should adhere to the requirements established in said section.

The Federal Funding Accountability and Transparency Act, 31 U.S.C. 6101 note, includes a requirement for awardees of applicable Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards. All awardees of applicable grants and cooperative agreements are required to report to the Federal Sub-award Reporting System (FSRS) available at <https://www.fsr.gov/> on all sub-awards over \$25,000. Refer to 2 CFR Parts 170.

VII. Agency Contacts

Please visit the CPO website for further information at or contact the CPO Grants Manager, Diane Brown, by mail (see address above) or at diane.brown@noaa.gov. Please allow up to two weeks after receipt for a response.

VIII. Other Information

None.